

APR 03 2006

TRANSMITTAL OF APPEAL BRIEF (Large Entity)

Docket No.
US010188/N066882

In Re Application Of: Jin Lu

Application No. 09/829,786	Filing Date 04/10/2001	Examiner Harun M. Yimam	Customer No. 28581	Group Art Unit 2611	Confirmation No. 1884
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Invention: SYSTEM AND METHOD FOR INSERTING VIDEO AND AUDIO PACKETS INTO A VIDEO TRANSPORT STREAM

COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:
February 1, 2006

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Dated: April 3, 2006

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DATE: APRIL 3, 2006

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Applicant(s): Jin Lu

Docket No.

US010188/N0668-82

Application No.

09/829,786

Filing Date

04/10/2001

Examiner

Harun M. Yimam

Group Art Unit

2611

Invention: **SYSTEM AND METHOD FOR INSERTING VIDEO AND AUDIO PACKETS INTO A VIDEO
TRANSPORT STREAM**I hereby certify that this Appeal Brief and Transmittal Letter

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:
Jin Lu

Examiner: Yiman, Harun M.

Serial No.: 09/829,786

Group Art Unit: 2611

Filed: April 10, 2001

Attorney Docket No.: US010188

For: System And Method For Inserting
Video And Audio Packets Into A Video
Transport Stream

Date: April 3, 2006

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BRIEF OF APPELLANT

This is an appeal from the Office action mailed on November 2, 2005 finally rejecting claims 1-21 in the application. This Brief is accompanied by the requisite fees set forth in 37 CFR 1.17(c). Authorization is hereby given for any additional fees due and owing in connection with this Brief or for any overpayment credit to be charged to Deposit Account No. 50-2061.

REAL PARTY IN INTEREST

Koninklijke Philips Electronics N.V., the assignee herein, is the real party in interest in the present appeal.

RELATED APPEALS AND INTERFERENCES

Koninklijke Philips Electronics N.V., the real party in interest in the above-captioned application, has no related applications currently on appeal or involved in an interference.

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STATUS OF CLAIMS

Claims 1-21 stand finally rejected and are being appealed herein.

STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final rejection mailed on November 2, 2005.

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1:

Claim 1 is drawn to an apparatus, for use in a broadcast facility, for inserting new data packets into an incoming digital video transport stream containing a plurality of original data packets. The apparatus comprises:

an input buffer (reference characters 310 and 311 in FIGURE 3) capable of storing said original data packets (reference characters 201-211) of said incoming digital video transport stream (reference character 200 in FIGURE 2); and

Specification: page 16, lines 8-11; page 17, lines 1-4; and page 12, line 19 through page 13, line 10.

a video processor (reference character 320) capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets (reference characters 251-254 in FIGURE 2B) may be inserted into said plurality of next incoming original data packets.

Specification: page 14, line 17 through page 16, line 3; page 16, lines 8-18; page 17, lines 4-17; and page 18, line 2 through page 21, line 22.

Claim 8:

Claim 8 is drawn to a method for inserting new data packets into an incoming digital video transport stream containing a plurality of original data packets. The method comprises the steps of:

storing the original data packets (reference characters 201-211) of the incoming digital video stream (reference character 200 in FIGURE 2);

Specification: page 17, lines 1-4; page 12, line 19 through page 13, line 10.

retrieving the stored original data packets;

Specification: page 17, lines 4-6.

determining from the original data packets N data frequencies associated with N most recently received ones of the plurality of original data packets;

Specification: page 17, lines 6-11; and page 14, line 22 through page 16, line 3.

estimating from the N data frequencies an estimated data frequency of a plurality of next incoming original data packets; and

Specification: page 18, line 2 through page 21, line 22.

using the estimated data frequency to determine an insertion rate at which the new data packets (reference characters 251-254 in FIGURE 2B) may be inserted into the plurality of next incoming original data packets.

Specification: page 17, lines 12-16.

Claim 15:

Claim 15 is drawn to a television broadcasting system (reference character 100 in FIGURE 1). The system comprises:

a plurality of network video sources (reference characters 121, 122, 123 in FIGURE 1), each of said plurality of network video sources capable of transmitting at least one

digital video transport stream to another facility (reference character 110 in FIGURE 1) in said television broadcast system; and

Specification: page 10, lines 10-14.

a plurality of broadcast facilities (reference character 110 in FIGURE 1), each of said plurality of broadcast facilities comprising an apparatus for inserting new data packets (reference characters 251-254 in FIGURE 2B) into a received one (reference character 200 in FIGURE 2A) of said at least one digital video transport stream containing a plurality of original data packets (reference characters 201-211 in FIGURE 2A), said apparatus comprising:

Specification: page 12, line 19 through page 13, line 10;

an input buffer (reference characters 310 and 311 in FIGURE 3) capable of storing said original data packets of said received digital video transport stream; and

Specification: page 16, lines 8-11; and page 17, lines 1-4.

a video processor (reference character 320) capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

Specification: page 14, line 17 through page 16, line 3; page 16, lines 8-18; page 17, lines 4-17; and page 18, line 2 through page 21, line 22.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

There are five grounds of rejection presented for review:

- I. Whether claims 1-6 and 8-13 are unpatentable under 35 U.S.C. 103(a) over U.S. Patent Publication 2002/0064177 to Bertram et al. (Bertram) and U.S. Patent 6,219,358 to Pinder et al. (Pinder).
- II. Whether claim 7 is unpatentable under 35 U.S.C. 103(a) over Bertram and Pinder and further in view of U.S. Patent 6,820,128 to Firoiu.
- III. Whether claim 14 is unpatentable under 35 U.S.C. 103(a) over Bertram and Pinder and further in view of Firoiu.
- IV. Whether claims 15-20 are unpatentable under 35 U.S.C. 103(a) over Bertram and U.S. Patent 6,473,858 to Shimomura and in view of Pinder.
- V. Whether claim 21 is unpatentable under 35 U.S.C. 103(a) over Bertram and Shimomura in view of Pinder and further in view of Firoiu.

ARGUMENT

I. REJECTION OF CLAIMS 1-6 AND 8-13 UNDER 35 U.S.C. 103(a)

The first ground of rejection presented for review is whether claims 1-6 and 8-13 are unpatentable under 35 U.S.C. 103(a) over Bertram and Pinder.

Independent claim 1 recites an apparatus for inserting new data packets into an incoming digital video transport stream containing a plurality of original data packets. Claim 1 calls for, *inter alia*,

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

Independent claim 8 recites a method for inserting new data packets into an incoming digital video transport stream containing original data packets. Claim 8 calls for, inter alia,

determining from the original data packets N data frequencies associated with N most recently received ones of the plurality of original data packets;

estimating from the N data frequencies an estimated data frequency of a plurality of next incoming original data packets; and

using the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the plurality of next incoming original data packets.

A claimed invention is *prima facie* obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine teachings. See *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Second, there must be a reasonable expectation of success. See *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, the prior art reference or combined references must teach or suggest all the claim limitations. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Bertram and Pinder, as combined by the Examiner, do not teach or suggest the video processor of the apparatus recited in claim 1 and the determining, estimating and using steps of the method recited claim 8.

The Examiner contends that Bertram teaches the subject matter of claims 1 and 8, except for "determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets." The Examiner further contends that this missing quoted subject matter of claims 1 and 8, is taught by Pinder in column 9, lines 11-18 and column 10, lines 5-17, which states:

The present invention provides adaptive rate control of data insertion into an outgoing bit stream. The system can accept an arbitrary MPEG bit stream and determine the properties of that incoming bit stream. The system then determines the available capacity for insertion of data into the MPEG bit stream and adjusts its operation based on the results. The insertion of data is done at a variable rate based on the available capacity, which varies in time.

Depending on the amount of content that is included in the outgoing bit stream, it will not always be possible to insert the outgoing MPEG tables at the desired insertion rate. Outgoing MPEG table packets can have a desired insertion rate higher that exceeds the available capacity. Packet handler 500 determines the available capacity for insertion of the bit stream and adjusts the rate of insertion from the desired to an actual insertion rate. The adjustment can be done based on parameters such as the type of MPEG table to be inserted or the desired frequency of insertion. Packet handler 500 constantly monitors the available capacity for insertion of the bit stream and adjusts the actual insertion rates accordingly.

As can be seen, Pinder does not teach or suggest determining from original data packets N data frequencies associated with N most recently received original data packets, as required by claims 1 and 8. Further, Pinder does not teach or suggest estimating from the N data frequencies an estimated data frequency of the next incoming original data packets, as also required by claims 1 and 8. Still further Pinder does not teach or suggest using the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the next incoming original data packets, as also required by claims 1 and 8.

Accordingly, Pinder fails to cure the acknowledged deficiencies of Bertram. Hence, the Examiner has failed to establish a *prima facie* case of obviousness of the apparatus of claim 1 and the method of claim 8.

Claims 2-6 and claims 9-13 depend from respective claims 1 and 8 and, therefore, include the limitations of claims 1 and 8, which are not taught or suggested by Bertram and Pinder. Consequently, the Examiner has failed to establish a *prima facie* case of obviousness of the apparatus of claims 2-6 and the method of claims 9-13, for at least the same reasons as argued for the patentability of claims 1 and 8.

In view of the foregoing, it is respectfully submitted that claims 1-6 and 8-13 are patentable under 35 U.S.C. §103(a) over Bertram and Pinder.

II. REJECTION OF CLAIM 7 UNDER 35 U.S.C. 103(a)

The second ground of rejection presented for review is whether claim 7 is unpatentable under 35 U.S.C. 103(a) over Bertram and Pinder and further in view of Firoiu.

Claim 7 depends indirectly from claim 1 and, therefore, calls for, *inter alia*,

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

The above arguments regarding the failure of Bertram and Pinder to teach or suggest the above recited video processor are incorporated herein by reference.

Firoiu fails to cure the deficiencies of Bertram and Pinder, as Firoiu does not teach or suggest a video processor that determines from original data packets N data frequencies associated with N most recently received original data packets; estimates from the N data frequencies an estimated data frequency of the next incoming original data packets; and uses the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the next incoming original data packets, as required by claim 7. Thus, Bertram and Pinder and further in view of Firoiu fail to arrive at the apparatus of claim 7.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of the apparatus of claim 7.

In view of the foregoing, it is respectfully submitted that claim 7 is patentable under 35 U.S.C. §103(a) over Bertram and Pinder and further in view of Firoiu.

III. REJECTION OF CLAIM 14 UNDER 35 U.S.C. 103(a)

The third ground of rejection presented for review is whether claim 14 is unpatentable under 35 U.S.C. 103(a) over Bertram and Pinder and further in view of Firoiu.

Claim 14 depends indirectly from claim 8 and, therefore, calls for, inter alia,

determining from the original data packets N data frequencies associated with N most recently received ones of the plurality of original data packets;

estimating from the N data frequencies an estimated data frequency of a plurality of next incoming original data packets; and

using the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the plurality of next incoming original data packets.

The above arguments regarding the failure of Bertram and Pinder to teach or suggest the above recited method steps are incorporated herein by reference.

Firoiu fails to cure the deficiencies of Bertram and Pinder, as Firoiu does not teach or suggest a method that determines from original data packets N data frequencies associated with N most recently received original data packets; estimates from the N data frequencies an estimated data frequency of the next incoming original data packets; and uses the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the next incoming original data packets, as required by claim 14. Thus, Bertram and Pinder and further in view of Firoiu fail to arrive at the method of claim 14.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of the method of claim 14.

In view of the foregoing, it is respectfully submitted that claim 14 is patentable under 35 U.S.C. §103(a) over Bertram and Pinder and further in view of Firoiu.

IV. REJECTION OF CLAIMS 15-20 UNDER 35 U.S.C. 103(a)

The fourth ground of rejection presented for review is whether claims 15-20 are unpatentable under 35 U.S.C. 103(a) over Bertram and Shimomura and in view of Pinder.

Independent claim 15 recites a television broadcasting system and calls for, inter alia,

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

The Examiner contends that Bertram and Shimomura teach the subject matter of claim 15, except for "determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets." The Examiner further contends that this missing quoted subject matter of claim 15, is taught by Pinder in column 9, lines 11-18 and column 10, lines 5-17, which states:

The present invention provides adaptive rate control of data insertion into an outgoing bit stream. The system can accept an arbitrary MPEG bit stream and determine the properties of that incoming bit stream. The system then determines the available capacity for insertion of data into the MPEG bit stream and adjusts its operation based on the results. The insertion of data is done at a variable rate based on the available capacity, which varies in time.

Depending on the amount of content that is included in the outgoing bit stream, it will not always be possible to insert the outgoing MPEG tables at the desired insertion rate. Outgoing MPEG table packets can have a desired insertion rate higher that exceeds the available capacity. Packet handler 500 determines the available capacity for insertion of the bit stream and adjusts the rate of insertion from the desired to an actual insertion rate. The adjustment can be done based on parameters such as the type of MPEG table to be inserted or the desired frequency of insertion. Packet handler 500 constantly monitors the available capacity for insertion of the bit stream and adjusts the actual insertion rates accordingly.

As can be seen, Pinder does not teach or suggest determining from original data packets N data frequencies associated with N most recently received original data packets, as required by claim 15. Further, Pinder does not teach or suggest estimating from the N data frequencies an estimated data frequency of the next incoming original data packets, as also required by claim 15. Still further Pinder does not teach or suggest using the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the next incoming original data packets, as also required by claim 15.

Accordingly, Pinder fails to cure the acknowledged deficiencies of Bertram and Shimomura. Hence, the Examiner has failed to establish a *prima facie* case of obviousness of the television broadcasting system of claim 15.

Claims 16-20 depend from claim 15 and, therefore, include the limitations of claim 15, which are not taught or suggested by Bertram and Shimomura and in view of Pinder. Consequently, the Examiner has failed to establish a *prima facie* case of obviousness of the television broadcasting system of claims 16-20, for at least the same reasons as argued for the patentability of claim 15.

In view of the foregoing, it is respectfully submitted that claims 15-20 are patentable under 35 U.S.C. §103(a) over Bertram and Shimomura and in view of Pinder.

V. REJECTION OF CLAIM 21 UNDER 35 U.S.C. 103(a)

The fifth ground of rejection presented for review is whether claim 21 is unpatentable under 35 U.S.C. 103(a) over Bertram and Shimomura in view of Pinder and further in view of Firoiu.

Claim 21 depends indirectly from claim 15 and, therefore, calls for, inter alia,

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

The above arguments regarding the failure of Bertram and Shimomura in view of Pinder to teach or suggest the above recited video processor are incorporated herein by reference.

Firoiu fails to cure the deficiencies of Bertram and Shimomura in view of Pinder, as Firoiu does not teach or suggest a video processor that determines from original data packets N data frequencies associated with N most recently received original data packets; estimates from the N data frequencies an estimated data frequency of the next incoming original data packets; and uses the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the next incoming original data packets, as required by claim 21. Thus, Bertram and Shimomura in view of Pinder and further in view of Firoiu fail to arrive at the television broadcasting system of claim 21.


Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of the television broadcasting system of claim 21.

In view of the foregoing, it is respectfully submitted that claim 21 is patentable under 35 U.S.C. §103(a) over Bertram and Shimomura in view of Pinder and further in view of Firoiu.

CONCLUSION

It has been shown that the claimed invention distinguishes over the express and implied teachings of the prior art cited of record in the application. Hence, Appellant respectfully requests that the Board reverse the Examiner and direct that the application proceed to issue.

Respectfully submitted,


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CLAIMS APPENDIX

1.(Original) For use in a broadcast facility, an apparatus for inserting new data packets into an incoming digital video transport stream containing a plurality of original data packets, said apparatus comprising:

an input buffer capable of storing said original data packets of said incoming digital video transport stream; and

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

2.(Original) The apparatus as set forth in Claim 1 wherein said video processor is further capable of identifying in said stored original data packets replaceable data packets not associated with at least one elementary data stream comprising a program carried in said incoming digital video transport stream.

3.(Original) The apparatus as set forth in Claim 2 wherein said video processor inserts said new data packets into said plurality of next incoming original data packets by replacing at least one replaceable data packet in said plurality of next incoming original data packets.

4.(Original) The apparatus as set forth in Claim 1 wherein said video processor is further capable of identifying in said original data packets null data packets.

5.(Original) The apparatus as set forth in Claim 4 wherein said video processor inserts said new data packets into said plurality of next incoming original data packets by replacing at least one null data packet in said plurality of next incoming original data packets.

6.(Original) The apparatus as set forth in Claim 1 wherein said video processor estimates said insertion rate as a function of a summation of the M most recently received original data packets.

7.(Original) The apparatus as set forth in Claim 6 wherein each of said M most recently received original data packets in said summation is scaled by a weighting factor, $a(k)$.

8.(Previously Presented) A method for inserting new data packets into an incoming digital video transport stream containing a plurality of original data packets, the method comprising the steps of:

storing the original data packets of the incoming digital video stream;

retrieving the stored original data packets;

determining from the original data packets N data frequencies associated with N most recently received ones of the plurality of original data packets;

estimating from the N data frequencies an estimated data frequency of a plurality of next incoming original data packets; and

using the estimated data frequency to determine an insertion rate at which the new data packets may be inserted into the plurality of next incoming original data packets.

9.(Original) The method as set forth in Claim 8 further comprising the step of identifying in the stored original data packets replaceable data packets not associated with at least one elementary data stream comprising a program carried in the incoming digital video transport stream.

10.(Original) The method as set forth in Claim 9 further comprising the step of inserting the new data packets into the plurality of next incoming original data packets by replacing at least one replaceable data packet in the plurality of next incoming original data packets.

11.(Original) The method as set forth in Claim 8 further comprising the step of identifying in the original data packets null data packets.

12.(Original) The method as set forth in Claim 11 further comprising the step of inserting the new data packets into the plurality of next incoming original data packets by replacing at least one null data packet in the plurality of next incoming original data packets.

13.(Original) The method as set forth in Claim 8 wherein the step of using the estimated data frequency to determine the insertion rate comprises the sub-step of estimating the insertion rate as a function of a summation of the M most recently received original data packets.

14.(Original) The method as set forth in Claim 13 further comprising the sub-step of scaling each of the M most recently received original data packets in the summation by a weighting factor, $a(k)$.

15.(Original) A television broadcasting system comprising:

a plurality of network video sources, each of said plurality of network video sources capable of transmitting at least one digital video transport stream to another facility in said television broadcast system; and

a plurality of broadcast facilities, each of said plurality of broadcast facilities comprising an apparatus for inserting new data packets into a received one of said at least one digital video transport stream containing a plurality of original data packets, said apparatus comprising:

an input buffer capable of storing said original data packets of said received digital video transport stream; and

a video processor capable of retrieving said stored original data packets from said input buffer and determining from said original data packets N data frequencies associated with N most recently received ones of said plurality of original data packets, wherein said video processor estimates from said N data frequencies an estimated data frequency of a plurality of next incoming original data packets and uses said estimated data frequency to determine an

insertion rate at which said new data packets may be inserted into said plurality of next incoming original data packets.

16.(Original) The television broadcasting system as set forth in Claim 15 wherein said video processor is further capable of identifying in said stored original data packets replaceable data packets not associated with at least one elementary data stream comprising a program carried in said received digital video transport stream.

17.(Original) The television broadcasting system as set forth in Claim 16 wherein said video processor inserts said new data packets into said plurality of next incoming original data packets by replacing at least one replaceable data packet in said plurality of next incoming original data packets.

18.(Original) The television broadcasting system as set forth in Claim 15 wherein said video processor is further capable of identifying in said original data packets null data packets.

19.(Original) The television broadcasting system as set forth in Claim 18 wherein said video processor inserts said new data packets into said plurality of next incoming original data packets by replacing at least one null data packet in said plurality of next incoming original data packets.

20.(Original) The television broadcasting system as set forth in Claim 15 wherein said video processor estimates said insertion rate as a function of a summation of the M most recently received original data packets.

Attorney Docket No.: US010188

21.(Original) The television broadcasting system as set forth in Claim 20 wherein each of said M most recently received original data packets in said summation is scaled by a weighting factor, $a(k)$.

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Attorney Docket No.: US010188

EVIDENCE APPENDIX

No evidence has been submitted pursuant to 37 C.F.R. 1.130, 1.131, or 1.132.

Attorney Docket No.: US010188

RELATED PROCEEDINGS APPENDIX

There are no decisions rendered by a court or by the Board of Patent Appeals and Interferences to append hereto.